Remarks/Arguments:

This is a reply to the office action of October 8.

Claims 19 - 22, 25 and 28 - 37 are rejected under 35 USC 103(a) as being obvious over Fujiwara (JP04078551A) in view of Berson (US5861618).
Claims 23, 24 and 27 are rejected as obvious over those references, further in view of Lubow (US 20030080191). Claim 38 is rejected as obvious over Fujiwara in view of Berson, and further in view of Genji (JP 02202465).

A minor correction is made above in claim 19, otherwise, the claims have not been amended. We request that the examiner please reconsider the rejections in view of the arguments restated below.

As specified in claims 19 and 36, a material-based security element is a substance which can be specifically identified by one of its characteristic features, e.g., its emission and/or absorption spectrum. Such security elements are different from design-related security elements such as, e.g., a specific indicia. The present invention evaluates *whether a specific chemical substance is present*; it does this by looking for a characteristic property of that substance. Security elements on this basis are called material-based security elements.

A material having some luminescent property is not necessarily a “material-based security element”. The competent skilled person understands this technical feature to mean "an element including a material of which a characteristic property relating to its specific nature and proportion allows materially authenticating the marked item by merely detecting said characteristic property". The material's characteristic property constitutes a material signature of the marking. An example of a characteristic property of a material is its specific emission and/or absorption spectrum which

identifies its presence in the marking (even among other materials), independently of any information on said marking.

Berson does not disclose any such material-based authentication of the marking; it only discloses using a time lag between an excitation of an emitter (phosphorescent pigment) and a corresponding response of said emitter to read marked information, (see Berson, column 1, lines 8 to 11, and column 2, line 19) without any noise contribution from the excitation source.

Many phosphorescent pigments have a time lag sufficient for allowing a switching operation of the light source, and thus could be used in Berson's ink (see the two examples given by Berson, column 3, lines 3 to 6). But the time lag of Berson's pigments is not sufficient to enable one to conclude that a *particular* material is present in the ink. The feature referred to by Berson is not specific enough to prove the presence of a particular material. Therefore, Berson does not teach the use of a material-based security element, i.e., a particular material whose presence can be unambiguously detected. Berson uses the luminescence only for improving a signal/noise ratio in detecting indicia, but not the use of luminescence for identifying the luminescent compound itself. Berson is silent about this. In fact, the scanning method disclosed by Berson only relates to information-based security markings (i.e. detection of information in the barcode and/or indicia) as the global luminescence/time lag property of the pigments cannot by itself authenticate the marking.

Applicant therefore respectfully disagrees with the examiner's opinion that the invisible ink including a luminescent material exhibiting time lag, in a method for reading marked information with improved signal/noise ratio, as disclosed by

Berson, can be interpreted as a material-based security element. In consequence, even by combining the prior art documents of Fujiwara and Berson, a skilled person would not arrive at the invention according to the currently pending claims.

The prior art documents cited by the examiner (Berson and Fujiwara) do not suggest authentication using a material-based security element and therefore do not render obvious the subject matter of the independent claims,19 and 36. The dependent claims are deemed allowable as well for the features they inherit from the independent claims.

We believe that the claims now presented are patentable over the prior art of record, and that this application is in condition for allowance.

Respectfully submitted,

/Charles Fallow/

Charles W. Fallow
Reg. No. 28,946

Shoemaker and Mattare, Ltd.
10 Post Office Road - Suite 100
Silver Spring, Maryland 20910

April 6, 2010